

Resolution Process for EPA Comments on BDCP EIR/S

*****Confidential Draft for Discussion Only*****

Policy Meeting #1

Attendees:

- DWR – Laura King Moon
- EPA – Kathleen Johnson, Jane Diamond
- NMFS – Maria Rea
- DOI – Letty Belin, Jennifer Gimbel

Goal for the meeting: Discuss any policy decisions that have been made already re: scope of the supplement and timing. Discuss how outcomes from the technical meetings will influence decision-making.

Topics for Discussion:

- Will water quality modeling be updated using existing water quality objectives at current compliance points? This policy question needs to be answered before progress can be made at the technical level meetings. For example, will the suite of models (CALSIM, ANN, DSM2) used to estimate water quality impacts be run again with the goal of meeting existing water quality objectives (e.g, Emmaton EC standard at Emmaton)? Will this include the 82-year modeling period or only the 16-year water quality modeling period? Are there any alternatives to re-modeling with existing water quality objectives that address the predicted increases in violations at Emmaton and other sites within the Delta?
- EPA concerns over sole reliance on habitat restoration for ecosystem recovery, recognizing that existing freshwater diversions and significantly diminished seaward flows have played a significant role in precluding the recovery of Bay Delta ecosystem processes and declining fish populations.
- EPA concerned that DEIS does not include full analysis of alternatives that integrate other measures such as conservation, IRWM, levee improvements, etc. The BDCP EIR/EIS should include a discussion of how BDCP fits into the larger water management plan for California.
- EPA concerned that the description of the proposed project requires additional detail, including related to financing, decision making, and adaptive management.
- EPA concerned that the No Action Alternative assumes that no actions will be taken by any party to address climate change. BDCP exports would affect water supply of other users. EPA recommends incorporation of predictable actions by others.
- EPA concerned that program-level inputs were used for project-level analyses and that program-level actions are being used to mitigate project-level effects. EPA recommends that the BDCP EIR/EIS include information necessary for federal permit decisions including quantitative estimates of sediment, contaminants, and soil that could be discharged to water bodies. EPA requests commitment to supplemental NEPA review if project-level analysis not provided in BDCP EIR/EIS. EPA requests demonstration that BDCP would meet CWA 404 requirements. EPA requests consideration of different CM1 designs including different intake locations, pumping infrastructure, and tunnel size.
- How will other public comments be incorporated into the decision-making?

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Technical Meeting #1 - Water Quality (Salinity and Bromide)

Attendees:

- DWR – Cassandra Enos
- EPA – Erin Foresman, Stephanie Skophammer, Tim Vendlinski
- ICF – Steve Centerwall, Gen Giudice, Chandra Chilmakuri
- USFWS – Derek Hilts, Leanna Zweig
- NMFS – Cathy Marcinkevage, Dave Swank
- USBR – Michelle Banonis
- State Water Board – Matthew Holland

Goal of the meeting: Share new information regarding water quality analyses.

Topics for Discussion:

- Was any additional modeling and/or analysis conducted by the lead agencies?
- EPA concern that modeling shows persistent violations of water quality standards in the Delta related to salinity and chloride.
- EPA concern that project would worsen water quality for users who divert water directly from the Delta, including increasing bromide around the North Bay Aqueduct intake at Barker Sl.
- EPA concerned that DEIS does not report compliance with flow-related D-1641 objectives.
- EPA concerned that DEIS does not explain why higher outflows result in higher salinity concentrations for Alternative 8 relative to Alternative 7.
- EPA is concerned about how the Rio Vista minimum flows will be met and how the State Board's current process for revisions to the WQCP has been integrated into the BDCP.
- What mitigation measures are available to mitigate to avoid impacts?
- Will all wq objectives be evaluated?

Technical Meeting #2 – Mercury and Selenium

Attendees:

- DWR – Cassandra Enos
- EPA – Stephanie Skophammer, Tim Vendlinski, Janet Hashimoto
- ICF – Adam Smith, Jennifer Pierre, Ben Giudice, Erin Healey
- DFW – Carl Wilcox
- USFWS – Leanna Zweig, Larry Rabin
- NMFS – Cathy Marcinkevage
- USBR – Michelle Banonis

Goal for the meeting: *need to be defined*

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Topics for Discussion:

- EPA concerned that DEIS underestimates the potential impacts of methylmercury and selenium contributions from restoration and operations.
- How will programmatic benefits to resident and migratory fishes from CM2 and CM4 be estimated and compared to estimated negative effects of CM1, CM2, and CM4?

Technical Meeting #3 – Other Beneficial Uses, Habitat Restoration, Outflow, and Reservoir Operations

Attendees:

- DWR – Cassandra Enos, Bill Harrell
- EPA – Erin Foresman, Stephanie Skophammer, Tim Vendlinski
- ICF – Jennifer Pierre, Ben Giudice, Lenny Grimaldo, David Zippin
- DFW – Carl Wilcox
- USFWS – Matt Nobriga, Larry Rabin, Steve Culberson
- NMFS – Cathy Marcinkevage
- USBR – Michelle Banonis

Goal for the meeting: *needs to be defined*

Topics for Discussion:

- EPA concerned that DEIS does not fully define and describe the relevance of the estuarine salinity gradient or report a year-round salinity gradient/Delta outflow analysis for each alternative.
- EPA concerned that DEIS does not describe potential effects on DO and other contaminant concentrations as a result of more frequent dead pool conditions in upstream reservoirs
- EPA concerns over sole reliance on habitat restoration for ecosystem recovery, recognizing that existing freshwater diversions and significantly diminished seaward flows have played a significant role in precluding the recovery of Bay Delta ecosystem processes and declining fish populations.
- EPA concerned that CM1 alternatives may contribute to declining populations of delta smelt, longfin smelt, green sturgeon, and winter-run, spring-run, fall-run, and late fall-run salmon and may not be mitigated by restoration. Restoration success assumed to be 100% in the DEIR/EIS. Less than 100% success may influence salinity results.
- EPA concerned that there is a potential for conflict with other HCPs.
- EPA concern that modeled longfin smelt abundance is estimated to decline for all but one of the alternatives, juvenile delta smelt entrainment is predicted to increase under Alt 4, and believes that delta smelt rearing habitat should be expressed in absolute terms. EPA requests more detail regarding how north Delta diversion screens would prevent entrainment.

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- How will NEPA effects determinations be revised in light of this discussion for beneficial use impairments?

Technical Meeting #4 – Detailed Analyses/Adequacy of the Document Issues

Attendees:

- DWR – Cassandra Enos, Bill Harrell, Mike Bradbury
- EPA – Erin Foresman, Stephanie Skophammer
- ICF – Jennifer Pierre, Adam Smith, Rebecca Sloan, Chandra Chilmakuri
- DFW – Carl Wilcox
- USFWS – Matt Nobriga, Larry Rabin, Steve Culberson, Lori Rinek
- NMFS – Cathy Marcinkevage
- USBR – Michelle Banonis
- Corps- Sue Clark

Goal for the meeting: Discuss changes that are being made to the document to address some of these concerns that are Adequacy of the Document issues.

Topics for Discussion:

- EPA concerned that the DEIR/EIS does not provide enough detail regarding the potential outcomes of the system impact studies and how that may affect procurement and placement of transmission and associated infrastructure, and associated terrestrial effects. .
- EPA concerned that BDCP and DEIR/EIS do not include adequate detail regarding export operations. In the south Delta, more detail is sought in regards to the Corps permit for SWP Banks operations and how BDCP use of that facility would meet Corps' goal of minimizing erosion. Additionally a description of CVP/SWP operations with and without each alternative should be included in Chapter 3 and add more detail to the north Delta bypass rules description. EPA also seeks clarification regarding E/I ratio used for BDCP.
- EPA is concerned that the relationship between the CM2 analysis and the current Reclamation planning efforts in Yolo Bypass are not clearly enough defined, including additional project-level analysis, relationship to BiOp, and if additional water would be needed to flood the bypass.
- EPA is concerned that the extent of wetlands, vernal pools, and waters have been underestimated. The extent of wetlands in the study area were determined based primarily on aerial mapping and the DEIR/EIS does not provide an estimate of the GIS-based mapping accuracy.
- EPA concerned that the DEIS air quality analysis did not adequately evaluate all conservation measures for general conformity.
- EPA concerned that the DEIR/EIS does not discuss effects on downstream resources or how Delta operations could require changes in upstream operations.
- Discuss how the decision rules will be described to determine impact determinations.
- EPA concerned that, in some cases, different NEPA effects determinations are provided for similar

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analyses and some NEPA conclusions were not provided. EPA is concerned that in-water construction BMPs are not clearly enough defined or may not be feasible or applicable on the scale required for BDCP.

- What is planned for dredged material and reuseable tunnel material?
- Discuss whether any additional information will be provided on energy usage for the BDCP and CVP/SWP system.
- EPA is concerned that the DEIS discussion of groundwater use changes as a result of surface water deliveries is not adequate. BDCP should consider including a mitigation measure for groundwater management in southern San Joaquin Valley.

Technical Meeting #5 – Modeling Approach

Attendees:

- DWR – Cassandra Enos, Bill Harrell
- EPA – Erin Foresman, Stephanie Skophammer
- ICF – Jennifer Pierre, Chandra Chilmakuri
- DFW – Carl Wilcox
- USFWS – Matt Nobriga, Larry Rabin, Steve Culberson
- NMFS – Cathy Marcinkevage
- USBR – Michelle Banonis

Goal of the meeting: *needs to be defined*

Topics for Discussion:

- EPA is concerned that the upstream temperature analyses do not use available daily models. Consider applying EPA Guidance Criteria for Water Temperature.
- EPA is concerned that the 20% M&I reduction mandates and differences in restoration footprints were not accounted for in modeling assumptions for water supply and demand.
- EPA is concerned that the DEIS discussion of groundwater use changes as a result of surface water deliveries is not adequate. BDCP should consider including a mitigation measure for groundwater management in southern San Joaquin Valley.

Policy Meeting #2

Attendees:

- DWR – Laura King Moon
- EPA – Kathleen Johnson, Jane Diamond
- NMFS – Maria Rea
- DOI – Letty Belin

Goal of the meeting: *needs to be defined. What products are we expecting from the technical meetings to*

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inform this conversation?

Topics for Discussion:

- EPA concern that modeling shows persistent violations of water quality standards in the Delta related to salinity and chloride.
- EPA concern that project would worsen water quality for users who divert water directly from the Delta, including increasing bromide around the North Bay Aqueduct intake at Barker Sl
- EPA concerned that CM1 operations would not protect beneficial uses for aquatic life, thereby violating the Clean Water Act.
- EPA is concerned about how the Rio Vista minimum flows will be met and how the State Board's current process for revisions to the WQCP has been integrated into the BDCP.
- EPA concerned that, in some cases, different NEPA effects determinations are provided for similar analyses and some NEPA conclusions were not provided.
- EPA is concerned that the BDCP does not include adequate description of detailed monitoring and management activities to support adaptive management, which should be consistent with current state and federal programs.